

1 1. An apparatus for monitoring the medical condition of a patient, said apparatus  
2 comprising:

3 a monitoring device which during use monitors one or more clinical features of  
4 the patient;

5 a predictive instrument arranged to receive output from the monitoring device and  
6 programmed to compute a probability of a medical outcome or diagnosis based on the  
7 monitored one or more clinical features, said predictive instrument further programmed  
8 to compute said probability by executing an algorithm which models said medical  
9 outcome or diagnosis; and

10 an interface through which a user enters information characterizing the patient,  
11 wherein said predictive instrument is further programmed to request said algorithm from  
12 a remote location.

1 2. The apparatus of claim 1 wherein the monitoring device is an  
2 electrocardiograph.

1 3. The apparatus of claim 2 wherein the algorithm enables the predictive  
2 instrument to compute said probability using a regression equation.

1 4. The apparatus of claim 3 wherein the regression equation is of the form:

$$P = 100 \left[ 1 - \frac{1}{1 + e^{b_0 + \sum b_i x_i}} \right]$$

3 wherein P is the probability of medical outcome or diagnosis,  $b_0$  is a constant, the  $x_i$ 's are  
4 explanatory variables, and the  $b_i$ 's are coefficients of corresponding explanatory  
5 variables.

1 5. The apparatus of claim 4 wherein P is a probability of acute cardiac ischemia.

1 6. An apparatus for enabling a remotely located predictive instrument to compute  
2 a probability of a medical outcome or diagnosis based on monitored one or more clinical  
3 features of a patient, said apparatus comprising:

4 a data storage area which stores a plurality of different algorithms, each of which  
5 models a corresponding medical outcome or diagnosis; and  
6 a server which is programmed to respond to a request from a remote device by  
7 retrieving a selected one of said plurality of different algorithms from said data storage  
8 and forwarding the selected algorithm to the remote device.

1 7. The apparatus of claim 6 wherein the request contains a patient profile and the  
2 server identifies which of the plurality of different algorithms is the selected algorithm  
3 based on the received patient profile.

1 8. A method for evaluating a medical condition of a patient, said method  
2 comprising:  
3 receiving input characterizing the patient;  
4 electronically retrieving from a remote location, an algorithm for computing a  
5 probability of a medical outcome or diagnosis;  
6 monitoring one or more clinical features of a patient; and  
7 using the retrieved algorithm to compute the probability of the medical outcome  
8 or diagnosis for the patient and based on the monitored features.

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